TM-1882

MAXIMUM LIFTING CAPACITY : 17TON

BOOM TRUCK

TM-1882 (17 ton) crane specifications

MAXIMUM LIFTING CAPACITY

17,000kg@ 1.5m(6-part lines)

BOOM

6-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction

Retracted length	5.6m
Extended length	25.1m
Extended speed	19.5m / 59s @ 2,430 rpm pump or 72s @ 2,000rpm pump
Elevation	Elevated by double-acting hydraulic cylinder
Elevation speed	-7˚ to 80˚ / 20 s @ 2,430rpm pump or 24s @ 2,000rpm pump

NOTE: Extended speed and elevation speed are calculated under the condition that the flow is 95L/min

Boom point	2 sheaves

WINCH

Hydraulic motor driven, Planetary gear speed reduction, provided with automatic break

Single line pull	3,265kg
	4,400kg (Winch capacity of permissible line pull at 1st layer)
Single line speed	85m/min (@ 3rd layer) @ 2,430 rpm pump or 70m/min @ 2,000rpm pump

NOTE: Single line speed is calculated under the condition that the flow is 216L/min

Wire rope

diameter x length	14mm x 85m
breaking strength	134kN

SWING

Hydraulic motor driven, Planetary gear speed reduction

Continuous 360˚ full circle swing (Standard)

Swing speed	360˚ / 37 s @ 2,430rpm pump or 45s @ 2,000rpm pump

Non-Continuous 375˚ rotation on ball bearing slew ring (Option)

Swing speed	375˚ / 38 s @ 2,430rpm pump or 47s @ 2,000rpm pump

OUTRIGGERS

<TRACTOR MOUNTED>

Outriggers (Out & Down type)

Hydraulically extended sliders and hydraulically extended jacks, integral with crane frame

Extend width	Min. 2,180mm
	Mid. 4,000mm
	Max. 5,700mm

Rear stabilizers

Hydraulically extended jacks, Integral with chassis frame

Span	2,250mm

Single front stabilizer

Hydraulic extended jack in front of bumper for 360˚ lifting operations

<CAB BACK MOUNTED>

Outriggers (Out & Down type)

Hydraulically extended sliders and hydraulically extended jacks, integral with crane frame

Extend width	Min. 2,180mm
	Mid. 4,000mm
	Max. 5,700mm

Rear stabilizers

Hydraulically extended jacks, Integral with chassis frame

Span	2,250mm

Single front stabilizer

Hydraulic extended jack in front of bumper for 360˚ lifting operations

<REAR MOUNTED>

Rear outriggers (Out & Down type)

Hydraulically extended sliders and hydraulically extended jacks, integral with crane frame

Extend width	Min. 2,180mm
	Mid. 4,000mm
	Max. 5,700mm

Front outriggers (Out & Down type)

Hydraulically extended sliders and hydraulically extended jacks, integral with chassis frame

Extend width	Min. 2,180mm
	Mid. 4,000mm
	Max. 5,700mm

HYDRAULIC

Hydraulic motor	For winch and swing
Control valves	Multiple control valves with integral safety valve
Hydraulic pump	3-section gear pump
	Winch system : (20.6MPa)
	121L/min @ 2,430rpm pump
	99.6L/min@ 2,000rpm pump
	Boom and outriggers system : (21.1Mpa)
	95L/min @ 2,430rpm pump
	78.2L/min @ 2,000rpm pump
	Swing system : (12.1Mpa)
	25L/min @ 2,430rpm pump
	20.6L/min @ 2,000rpm pump
Reserve tank	295L capacity
	*PTO and Mounting not included

ELECTRICAL SYSTEM

Power supply	DC12V with a converter (Step down converter from 24V)

SAFETY DEVICES

Pendant type over-winding cut out
Hook safety latch
Level gauge
Hydraulic safety valves, check valves and holding valves
Overload shutoff with load indicator (TADANO's exclusive "AMA" system)
- Load / Boom angle indication
- Audible warning
- External warning lamps

BOOM REST

Removable

TORSION BOX

<TRACTOR MOUNTED>
The weight of standard torsion box is approx. 295kg (2,160mm height)

<CAB BACK MOUNTED>
The weight of 22ft (6.7m) flat bed torsion box is approx. 1,800kg (Optional)

<REAR MOUNTED>
The weight of 12ft (3.6m) flat bed torsion box is approx. 975kg (Not included front outriggers weight of 1,270kg)

CRANE WEIGHT

Approx. 5,800kg (bare)
Approx. 7,100kg (include all items (crane,tank,oil,rear stabilizer,boom rest,hook,etc.))

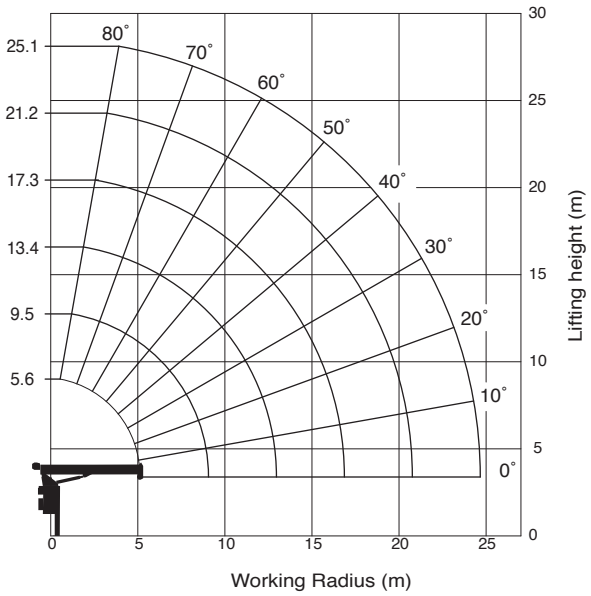
OPTION

Hook block
Swivel hook with safety latch
1) 3,200kg capacity (for single line use, 60kg)
2) 6,000kg capacity (for two part lines use, 100kg)
3) 12,000kg capacity (for four part lines line use, 160kg)
4) 18,000kg capacity (for six part lines use, 220.5kg)

*Note
A crane does not come with a hook block as a standard item and shall be ordered out from the above.

TM-1882 (17 ton) crane capacity

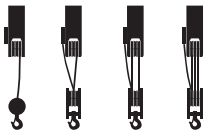
WORKING RANGE



The above lifting heights and boom angles are based on a straight (unladen)boom, and allowance should be made for boom deflection obtained under laden condition.

NOTE:

1) Rated lifting capacities on this chart show maximum allowable loads with outriggers properly extended on a firm surface and the crane leveled and mounted on a factory recommended truck. The rated lifting capacities in shaded areas are based on crane strength and others, on its stability.
2) The weight of handling devices such as hook block, slings, etc., must be considered part of the load and must be deducted from the rated lifting capacities.
3) Weights of any accessories attached to the boom or loadline must be deducted from the rated lifting capacities.
4) The operator must reduce loads to allow for such factors as wind, ground conditions, operating speed and the effects of freely suspended loads such as boom deflection.
5) For full capacity 360°around the truck,the chassis requires the front stabilizer (ex. rear mounted) and additional counterweight in the underside of the bed.
6) For boom lengths or radius not shown, use the rated lifting capacity of next longer boom lengths or radius.
7) For boom lengths longer than 9.5m, extend outriggers to max. or mid.
8) For boom lengths longer than 17.3m, extend outriggers to max.
9) 17.3m boom means 1st mark on 4th boom section side plate is half visible.
10) 21.2m boom means 2nd mark on 4th boom section side plate is half visible.
11) Winch wire rope: diameter × length 14mm × 85m, breaking strength 134 kN
12) Keep at least 3 wraps of loadline on winch drum.
13) Maximum load for number of part lines is as shown below.
14) Part of lines are;



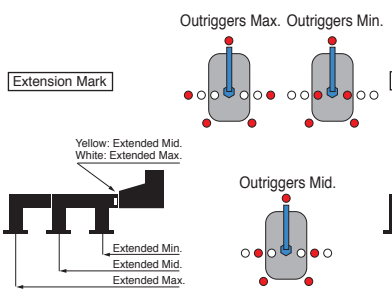
No. of part lines	1	2	4	6
Max. of load	3,200kg	6,000kg	12,000kg	17,000kg

RATED LIFTING CAPACITY (IN KILOGRAMS) SAE85% / ISO4305

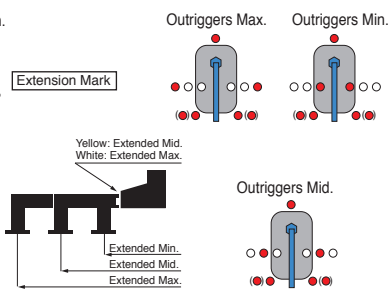
Load radius (m)	5.6m Boom				9.5m Boom				13.4m Boom			17.3m Boom			21.2m Boom		25.1m Boom		Load radius (m)
	Loaded Boom Angle	Outriggers Extended			Loaded Boom Angle	Outriggers Extended			Loaded Boom Angle	Outriggers Extended		Loaded Boom Angle	Outriggers Extended		Loaded Boom Angle	Outriggers Extended	Loaded Boom Angle	Outriggers Extended	
		Max.	Mid.	Min.		Max.	Mid.	Min.		Max.	Mid.		Max.	Mid.		Max.		Max.	
1.5	75°	**17,000**	**13,600**	**10,000**															1.5
2.5	63°	**10,000**	**10,000**	6,600	76°	**7,900**	**7,900**	5,800											2.5
3.0	57°	**8,800**	**8,800**	4,600	73°	**7,900**	**7,900**	4,000	78°	**7,900**	**7,900**								3.0
3.5	51°	**7,800**	**7,800**	3,600	69°	**7,200**	**7,200**	3,000	76°	**7,000**	**7,000**								3.5
4.0	43°	**6,800**	**6,800**	2,800	66°	**6,400**	**6,400**	2,400	74°	**6,000**	**6,000**	80°	**4,000**	**4,000**					4.0
5.0	21°	**5,600**	5,500	1,900	59°	**5,400**	5,100	1,600	69°	**5,000**	4,800	76°	**4,000**	4,000	78°	**4,000**			5.0
6.0					51°	**4,400**	3,600	1,100	65°	**4,100**	3,600	73°	**3,800**	3,600	75°	**3,200**	78°	1,800	6.0
8.0					33°	**3,200**	2,000	500	55°	**3,100**	2,000	66°	**2,900**	2,000	70°	**2,600**	74°	1,800	8.0
10.0									43°	**2,400**	1,200	58°	2,200	1,200	64°	**2,100**	69°	1,800	10.0
12.0									28°	1,700	800	49°	1,700	800	58°	**1,700**	64°	1,500	12.0
14.0												40°	1,400	500	51°	**1,400**	59°	1,200	14.0
16.0												27°	1,000	350	44°	**1,000**	53°	1,000	16.0
18.0															35°	**800**	47°	800	18.0
20.0															25°	**650**	41°	650	20.0
22.0																	33°	500	22.0
24.0																	24°	350	24.0
		3,810	**3,810**	1,830		**1,750**	1,540	270		**830**			**490**	310		**270**		150	
		(5.15m)				(9.05m)				(12.95m)			(16.85m)			(20.75m)		(24.65m)	

Notice : The chart is only for reference and should not be used for operation.
Maintain a clearances at least 3m between any part of the crane, load line or load and any electrical line carrying up to 50,000 volts.
0.3m additional clearance is required for every additional 30,000 volts or less.

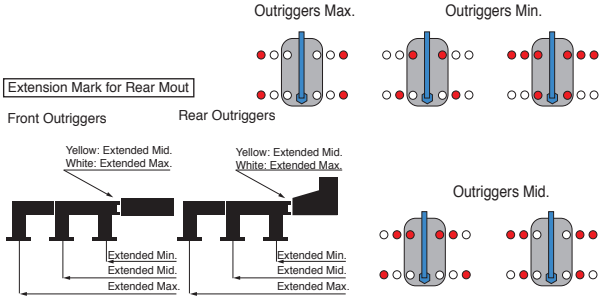
<TRACTOR MOUNTED>



<CAB BACK MOUNTED>



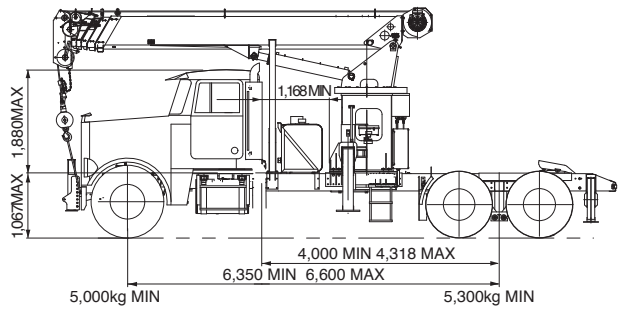
<REAR MOUNTED>



TM-1882 (17 ton) crane configurations

<TRACTOR MOUNTED>

(mm)



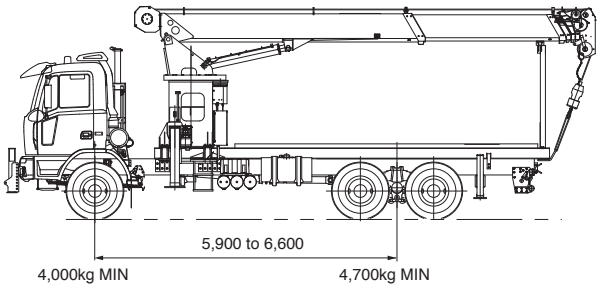
This mount requires front stabilizer, rear stabilizers, and additional counter-weight in the underside of the tractor frame for full capacity 360˚ around the truck.The complete unit must be istalled in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements for variety of trucks.
TRACTOR MOUNTED product can not convert to REAR MOUNTED configuration.

Gross Axle Mass Rating(GAMR),front	approx. 9,000 kg
Gross Axle Mass Rating(GAMR),rear	approx. 15,400 kg
Gross Vehicle Mass Rating	approx. 24,400 kg
Wheelbase(WB)	6,350 to 6,600 mm
Cab to axle	4,000 to 4,318 mm
Stability Mass, front	5,000 kg Min. (*)
Stability Mass, rear	5,300 kg Min. (*)
Frame Section Modulus(SM) under crane, 758MPa steel	500 cm³ Min. per rail
Frame Section Modulus(SM) at the front stabilizer attachment point, 758MPa steel	35 cm³ Min. per rail
Frame Section Modulus(SM) over rear stabilizers, 758MPa steel	427 cm³ Min. per rail
PTO torque	Approx. 390 N-m Min.
PTO revolution	Approx. 550 to 2,400 rpm.
Width for crane mounting	Approx. 1,400 mm Min.
Frame width (outside)	Approx. 915 mm Max.
Frame height (ground to frame top)	Approx. 1,060 mm Max.

* Estimated axle scale weights prior to installation of crane and stabilizers for 78% stability. Include counterweight.

<CAB BACK MOUNTED>

(mm)



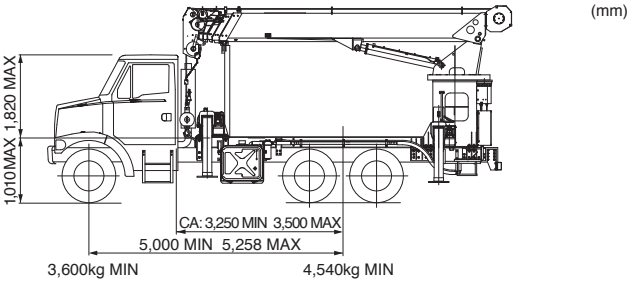
This mount requires front stabilizer,rear stabilizers torsion resisting box and additional counterweight in the underside of the bed for full capacity 360˚ around the truck.
The complete unit must be istalled in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements for variety of trucks.
CAB BACK MOUNTED product can not convert to REAR MOUNTED configuration.

Gross Axle Mass Rating(GAMR),front	approx. 7,200 kg
Gross Axle Mass Rating(GAMR),rear	approx. 15,400 kg
Gross Vehicle Mass Rating	approx. 22,600 kg
Wheelbase(WB)	5,900 to 6,600 mm
Cab to axle	4,000 to 4,800 mm
Stability Mass, front	4,000 kg Min. (*)
Stability Mass, rear	4,700 kg Min. (*)
Frame Section Modulus(SM) 758MPa steel	328 cm³ Min. per rail
Frame Section Modulus(SM) at the front stabilizer attachment point, 758MPa steel	35 cm³ Min. per rail
Frame Section Modulus(SM) over rear stabilizers, 758MPa steel	213 cm³ Min. per rail
PTO torque	Approx. 390 N-m Min.
PTO revolution	Approx. 550 to 2,400 rpm.
Width for crane mounting	Approx. 1,400 mm Min.
Frame width (outside)	Approx. 915 mm Max.
Frame height (ground to frame top)	Approx. 1,060 mm Max.

* Estimated axle scale weights prior to installation of crane and stabilizers for 78% stability. Include counterweight.

<REAR MOUNTED>

(mm)

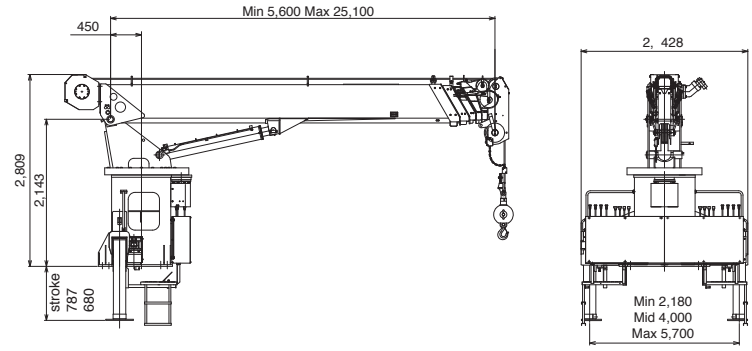


This mount requires front outriggers, torsion resisting box and additional counterweight in the underside of the bed for full capacity 360˚ around the truck.The complete unit must be istalled in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary.
REAR MOUNTED product can not convert to CAB BACK MOUNTED configuration.

Gross Axle Mass Rating(GAMR),front	approx. 6,350 kg
Gross Axle Mass Rating(GAMR),rear	approx. 15,400 kg
Gross Vehicle Mass Rating	approx. 21,750 kg
Wheelbase(WB)	5,000 to 5,258 mm
Cab to axle	3,250 to 3,500 mm
Stability Mass, front	3,600 kg Min. (*)
Stability Mass, rear	4,540 kg Min. (*)
Frame Section Modulus(SM) under crane, 758MPa steel	500 cm³ Min. per rail
Frame Section Modulus(SM) over rear outriggers, 758MPa steel	500 cm³ Min. per rail
PTO torque	Approx. 390 N-m Min.
PTO revolution	Approx. 550 to 2,400 rpm.
Width for crane mounting	Approx. 1,400 mm Min.
Frame width (outside)	Approx. 915 mm Max.
Frame height (ground to frame top)	Approx. 1,010 mm Max.

* Estimated axle scale weights prior to installation of crane and stabilizers for 78% stability. Include counterweight.

TM-1882 (17 ton) crane dimensional specifications



Introducing the TADANO TM-1882, the TADANO TM-1882 tractor mounted crane is also available in a straight truck mount behind the cab as well as rear mounted. TADANO has over 50 years of experience in manufacturing high quality cranes featuring innovative ideas and leading edge technology. The TM-1882 answers a real need for a true Boom Truck for all over the world. This is the crane that everyone has been looking for and we have delivered a crane packed with great features and superior performance.

With its long reach and high lift, we believe the TM-1882 is one of our most desirable cranes. TADANO builds a vast range of cranes from 0.5 ton to 600 tons. No matter what your reach or lift requirements are, TADANO can provide you with a great solution. Put one to work for you now. Call today or visit our web site for more information.

Features:

Exceptional Reach without a Jib: 25.1m. Full powered partly synchronized Boom
Self-Aligning Pentagonal Shaped Boom: reducing maintenance cost
Light Weight: increases payload
Out & Down Mainframe Outriggers: complete level ability
Multiple Outrigger Span: easy to set up in various job sites
Faster Function Speeds: increase productivity
Superior Winch Performance: up to 85m/min. increase productivity
Shear Plate Mounting: more secure “no creep mount”
Large Hydraulic Reservoir: superior cooling capabilities
Operator Friendly: dual control stations with exceptional job site viewing
Complete Load Monitoring: TADANO’s exclusive “AMA” system

Ask today for your future business solution

Continuing technical development requires Tadano to retain the right to make specifications, equipment and price changes without notice.

*Some specifications are subject to change

TADANO Lifting your dreams

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